

What is claimed is

1. Method for forgery recognition, comprising:

5 (a) capturing an image sequence comprising a plurality of images of the fingerprint to be recognized;

(b) forming of at least one differential image from two images of the captured image sequence;

10 (c) capturing a texture in the at least one differential image;

(d) comparing the texture with a predetermined texture to determine whether the captured image sequence comes from a
15 real finger or from an imitation.

2. Method according to claim 1, wherein the image sequence is generated during placing of a finger on a sensor unit and comprises images that are consecutive in time.
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3. Method according to claim 1, wherein the images of the captured image sequence are captured as gray scale images.

4. Method according to claim 1, wherein a plurality of
25 differential images is generated in step (b) by subtracting two consecutive images of the image sequence, respectively, images to be subtracted are those images that are arranged in the captured image sequence at the time of the first contact between finger and sensor unit.

30 5. Method according to claim 1, wherein in step (d) the texture captured in step (c) is compared with the first texture for a real finger and with a second texture for an imitation in order to classify the captured texture.

35 6. Method according to claim 1, wherein the step (d) comprises:

(d1) filtering the gray scale differential image to obtain a gradient image,

(d2) calculating a histogram of the gradient image;

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(d3) correlating the calculated histogram with a first given mask for a real finger and with a second given mask for an imitation, and

10 (d4) classifying the captured image sequence as coming from a real finger if the value of the correlation with the first mask is higher than the value of the correlation with the second mask.

15 7. Method according to claim 6, wherein the steps (d1) and (d2) are carried out for a plurality of differential images wherein the method comprises the following steps before the steps (d3) and (d4):

20 calculating a centre of gravity in each histogram,

comparing the centre of gravity with a threshold, and

passing on those histograms, whose centre of gravity

25 exceeds the threshold, to the steps (d3) and (d4).